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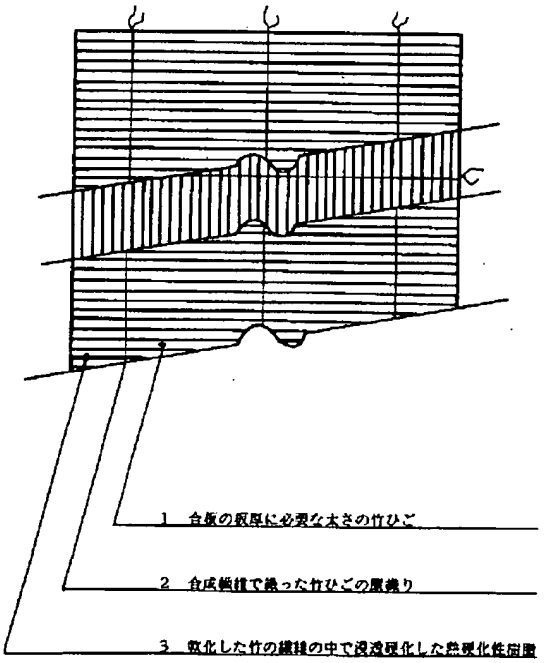
(54)【発明の名称】　竹材を必要な板厚の合板に加工する為の製法

(57)【要約】

【目的】竹を材料として必要な板厚の合板に加工する為の製法である。

【構成】竹材から合板を作る為に合板の板厚に必要な太さの竹ひご（１）を作り、その竹ひごを合成繊維で簾織り（２）にし水酸化ナトリウム溶液で煮込み洗浄中和させる事で、竹のあくを抜くと共に、竹ひごを軟化させ繊維化させる。軟化し繊維化した竹ひごの簾織り板に、熱硬化性樹脂（３）を浸透させた上で、合板の板厚に必要な枚数の竹ひごの簾織り板を縦横に重ね合わせて圧縮過熱接着し、竹材を必要な板厚の合板に加工する製法である。



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【特許請求の範囲】

【請求項１】竹材を必要な板厚の合板に加工する為に、竹材から板厚に必要な太さの竹ひごを作り、合成繊維で簾織りする。それを水酸化ナトリウム溶液で煮込み洗浄中和させる事で、竹のあくを抜くと共に簾織りした竹ひごを軟化させ繊維化させる。軟化し繊維化した竹ひごの簾織り板に熱硬化性樹脂を浸透させた上で合板の板厚に必要な枚数の簾織り板を縦横に重ね合わせ、圧縮過熱接着する製法である。

【発明の詳細な説明】

この発明は、竹を材料として必要な板厚の合板に加工する為の製法である。従来、竹の材料を平板に加工する事は竹材が筒状であるだけに困難であった。竹材から合板の板厚に必要な太さの竹ひごを作り合成繊維で簾織りする。それを水酸化ナトリウム溶液で煮込み洗浄中和させる事で、竹のあくを抜くと共に、簾織りした竹ひごを軟化させ繊維化させる。軟化し繊維化した竹ひごの簾織り

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板に熱硬化性樹脂を浸透させ、合板の板厚に必要な枚数の簾織り板を縦横に重ね合わせ、圧縮過熱接着する製法である。この製法は、竹材の耐久性、加工性に於いて産業上の利用分野の変革を生み出すと共に、コンクリートの型枠材の代用品として活用出来る為、特にコンクリートの型枠材として大量消耗されている地球上の熱帯雨林伐採の抑制効果を生む。本発明の基本製法を図面にて説明する。図１は、竹材を必要な厚みの合板に加工する為の製法を図式化したものである。

【図面の簡単な説明】

【図１】　本発明、竹合板の平面の部分断面図

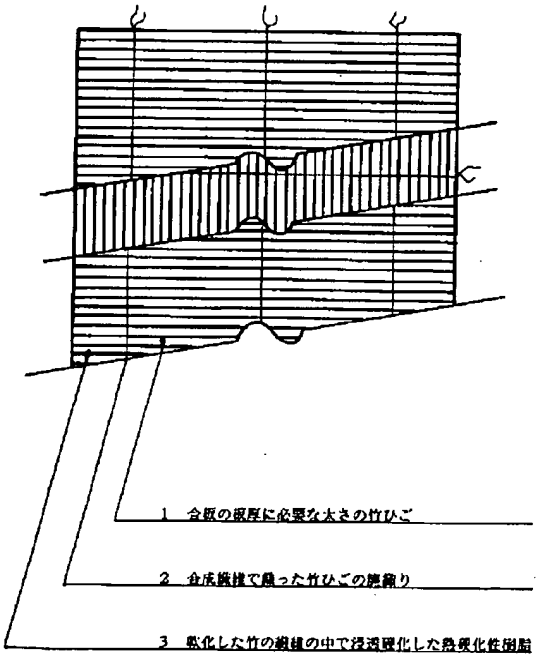
【符号の説明】

１　は合板の板厚に必要な太さの竹ひご

２　は合成繊維で織った竹ひごの簾織り

３　は軟化した竹の繊維の中で浸透硬化した熱硬化性樹脂

【図１】

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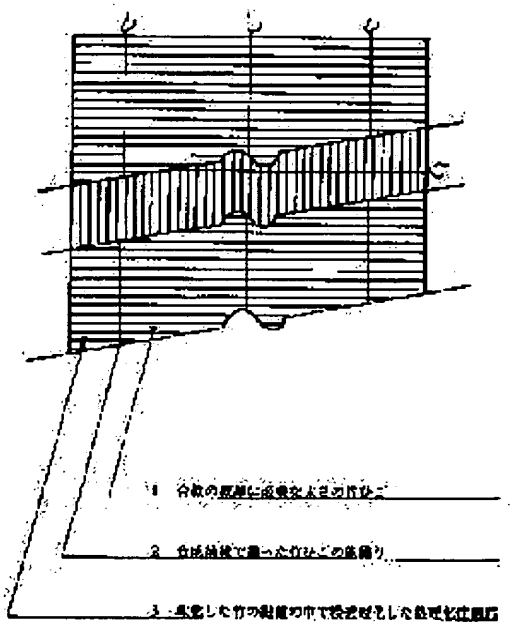
(72)Inventor : SHIMIZU HIDEKI

## (54) MANUFACTURING METHOD FOR PROCESSING BAMBOO MATERIAL INTO PLYWOOD WITH NECESSARY THICKNESS

(57)Abstract:

PURPOSE: To put a bamboo material to practical use as a substitute for a form for concrete by forming bamboo strips having a thickness necessary for the thickness of plywood from a bamboo material to weave them using a fiber to form a bamboo screen and boiling, washing and neutralizing the screen in a sodium hydroxide soln. to remove harshness therefrom to soften and fibrilating the same.



CONSTITUTION: Bamboo strips 1 having thickness necessary for the thickness of plywood are formed from a bamboo material to be woven using a synthetic fiber to form a bamboo screen 2. This screen 2 is boiled, washed and neutralized in a sodium hydroxide soln. not only to remove harshness from the fabric 2 but also to soften the screen. The softened and fibrilated screen 2 made of the bamboo strips is impregnated with a thermosetting resin 3 and a number of the screens 2 necessary for the thickness of the plywood are longitudinally and laterally superposed one upon another and compressed, heated and bonded to be processed into the plywood. This plywood is put to practical use as a form material to be used as substitute for wood and the timber-felling of tropical rain forest can be suppressed.

LEGAL STATUS

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CLAIMS

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[Claim(s)]
[Claim 1] In order to process a cane into the plywood of required board thickness, the bamboo stick of a size required for board thickness is made from a cane, and Ren textile is carried out with a synthetic fiber. The bamboo stick which ******(ed) while extracting the bitter taste of a bamboo is softened, and it is made to fibrose by boiled and carrying out washing neutralization of it with a sodium-hydroxide solution. Ren of the bamboo stick which became soft and fibrosed -- textile -- Ren of number of sheets required for the board thickness of a plywood after making thermosetting resin permeate a plate -- textile -- they are superposition and the process which carries out compression overheating adhesion in all directions about a plate.

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## DETAILED DESCRIPTION

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[Detailed Description of the Invention]
This invention is a process for processing a bamboo into the plywood of board thickness required as an ingredient. Because the cane was cylindrical, it was difficult to process the ingredient of a bamboo into a plate conventionally. The bamboo stick of a size required for the board thickness of a plywood is made from a cane, and Ren textile is carried out with a synthetic fiber. While extracting the bitter taste of a bamboo, the bamboo stick which ******(ed) is softened and it is made to fibrose by boiled and carrying out washing neutralization of it with a sodium-hydroxide solution. Ren of the bamboo stick which became soft and fibrosed -- textile -- a plate is permeated in thermosetting resin -- making -- Ren of number of sheets required for the board thickness of a plywood -- textile -- they are superposition and the process which carries out compression overheating adhesion in all directions about a plate. Since it is utilizable as a substitute of the shuttering material of concrete while producing the change of the field of the invention on industry in the endurance of a cane, and workability, this process induces the depressor effect of the tropical-rain-forests tree trimming on the earth by which large quantity consumption is especially carried out as shuttering material of concrete. A drawing explains the basic process of this invention. Drawing 1 diagrams the process for processing a cane into the plywood of required thickness.

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## DESCRIPTION OF DRAWINGS

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[Brief Description of the Drawings]
[Drawing 1] This invention, the fragmentary sectional view of the flat surface of bamboo plywood
[Description of Notations]
1 Bamboo Stick of Size Required for Board Thickness of ******
2 Ren of Bamboo Stick Woven by ********** -- Textile
3 Thermosetting Resin Which Carried Out Osmosis Hardening in Fiber of Bamboo Which ******(ed)

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[Translation done.]

1.This document has been translated by computer. So the translation may not reflect the original precisely.
2.**** shows the word which can not be translated.
3.In the drawings, any words are not translated.

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DRAWINGS

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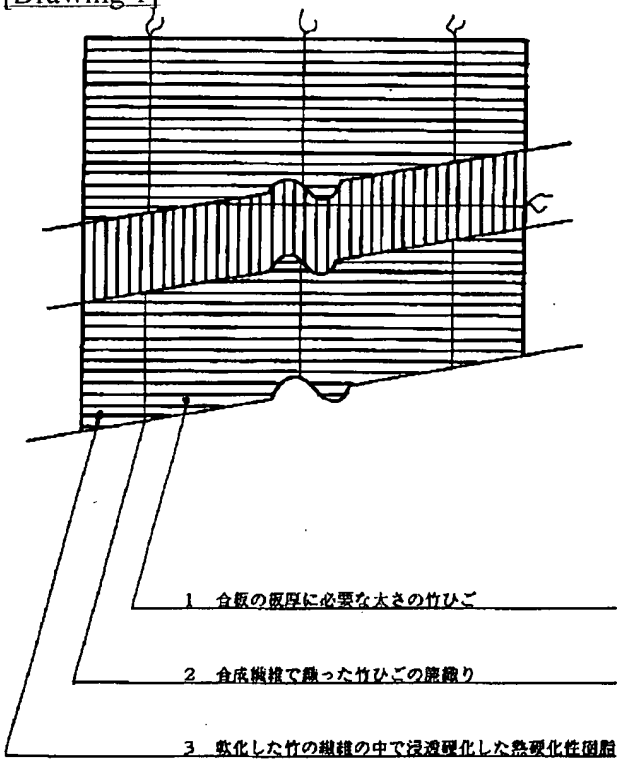
[Drawing 1]

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